

In the claims:

Please amend claims 1-11, and add new claims 12-16 as follows.

1. (Currently amended) A Virtual Device composed of a multitude of stationary and/or portable electronic devices, ~~including~~ comprising:

a first Open Device with an available inner structure and a network interface[[,]];

at least one Primitive Device arranged to communicate with other devices and act as a pure slave to said devices[[,]];

~~characterized in~~ at least one Closed Device with a closed inner structure and a network interface[[,]];

said ~~open~~ Open and ~~closed~~ Closed devices being connected in a Personal Area Network, a Personal Area Network middleware being installed in said first Open Device, said first Open Device being arranged to act as a Personal Area Network controller, wherein
said Personal Area Network middleware is arranged to store and maintain a device profile, said device profile including information on at least identity, type, capabilities and services offered by any Open, Closed or Primitive Devices available for said Private Area Network,
said ~~open device~~ Open Device being arranged to discover and register any devices present in said Personal Area Network, said Personal Area Network middleware being arranged to redirect an output stream from one device to an input port on another device,
said Personal Area Network middleware being arranged to redirect an application to a specific device present in said Personal Area Network,
said Personal Area Network middleware being arranged to store and maintain a user profile, said user profile including

information on at least which Open, Closed or Primitive Devices ~~that~~ are members of said Private Area Network, which Open, Closed or Primitive Devices ~~that~~ are available for said Private Area Network, redirection information, which Open, Closed or Primitive Devices ~~that~~ should be visible on an external network, the distribution of services among Open or Closed Devices present, and the distribution of resources among Open or Closed Devices present, said Personal Area Network middleware further including a user interface enabling the user to control the Personal Area Network middleware, and an Application Programming Interface to said Personal Area Network middleware allowing applications access to capabilities and functions in said Personal Area Network middleware.

2. (Currently amended) A Virtual Device as claimed in claim 1, ~~characterized in~~ further comprising a second Open Device connected to said Personal Area Network.

3. (Currently amended) A Virtual Device composed of a multitude of stationary and/or portable electronic devices, ~~including~~ comprising:

an Open Device with an available inner structure and a network interface[[,]];

at least one Primitive Device arranged to communicate with other devices and act as a pure slave to said devices[[,]];

~~characterized in~~ at least one further Open Device[[,]];

at least one Closed Device with a closed inner structure and a network interface[[,]];

said ~~open~~ Open and ~~closed~~ Closed devices being connected in a Personal Area Network, including: the Personal Area Network middleware being installed on said Open Devices, said Personal Area Network Middleware being distributed between said Open Devices, said Open Devices being arranged to act as a Personal Area Network controller, wherein said Personal Area Network middleware is arranged to store and maintain a device profile, said device profile including information on at least identity, type, capabilities and services offered by any Open, Closed or Primitive Devices available for said Private Area Network, said open devices being arranged to discover and register any devices present in said Personal Area Network, said Personal Area Network middleware being arranged to redirect an output stream from one device to an input port on another device, said Personal Area Network middleware being arranged to redirect an application to a specific device present in said Personal Area Network, said Personal Area Network middleware being arranged to store and maintain a user profile, said user profile including information on at least which Open, Closed or Primitive Devices that are members of said Private Area Network, which Open, Closed or Primitive Devices that are available for said Private Area Network, redirection information, which Open, Closed or Primitive Devices that should be visible on an external network, the distribution of services among Open or Closed Devices present, and the distribution of resources among Open or Closed Devices present, said Personal Area Network middleware further including a user interface enabling the user to control the Personal Area Network middleware, and an Application Programming Interface to said Personal Area Network middleware allowing applications access to capabilities and functions in said Personal Area Network middleware,

each Open Device being arranged to invoke services running on other Open Devices.

4. (Currently amended) A Virtual Device as claimed in claim ~~1, 2, or 3, characterized in that~~ wherein at least one of said Open or Closed Devices is equipped with a network interface connected to an external network.

5. (Currently amended) A Virtual Device as claimed in claim 4, further comprising ~~characterized in~~ a server in said external network arranged to store a backup copy of information stored in said Personal Area Network, and synchronize said backup copy with said information.

6. (Currently amended) A Virtual Device as claimed in claim 5, wherein ~~characterized in that~~ said ~~open device~~ Open Device or devices is/are arranged to periodically poll the network.

7. (Currently amended) A Virtual Device as claimed in claim 3, further comprising ~~characterized in that~~ a Web services platform ~~is~~ installed on each Open Device for enabling each Open Device to invoke Web services running on other Open Devices.

8. (Currently amended) A Virtual Device composed of a multitude of portable electronic devices, comprising:

~~including~~ an Open Device with an available inner structure and a network interface, at least one Primitive Device arranged to communicate with other devices and act as a pure slave to said devices[[,]]; ~~characterized in~~ at least one Closed Device with a closed inner structure and a network interface, said at least one Closed Device being equipped with a network interface connected to an external network which includes a

Personal Area Network server, a Personal Area Network middleware being installed on said server, said ~~open~~ Open and ~~closed~~ Closed devices and said server forming a Personal Area Network operated by said Personal Area Network middleware, wherein

said Personal Area Network middleware is arranged to store and maintain a device profile, said device profile including information on at least identity, type, capabilities and services offered by any Open, Closed or Primitive Devices available for said Private Area Network,

said ~~open-device~~ Open Device being arranged to discover and register any devices present in said Personal Area Network, said Personal Area Network middleware being arranged to redirect an output stream from one device to an input port on another device,

said Personal Area Network middleware being arranged to redirect an application to a specific device present in said Personal Area Network,

said Personal Area Network middleware being arranged to store and maintain a user profile, said user profile including information on at least which Open, Closed or Primitive Devices that are members of said Private Area Network, which Open, Closed or Primitive Devices that are available for said Private Area Network, redirection information, which Open, Closed or Primitive Devices that should be visible on an

external network, the distribution of services among Open or Closed Devices present, and the distribution of resources among Open or Closed Devices present, said Personal Area Network middleware further including a user interface enabling the user to control the Personal Area Network middleware, and an Application Programming Interface to said Personal Area Network middleware allowing applications access to capabilities and functions in said Personal Area Network middleware.

9. (Currently amended) A Virtual Device composed of a multitude of portable electronic devices, comprising:
~~characterized in~~ a Closed Device with a closed inner structure and a network interface connected to an external network[[,]];;

at least one Primitive Device arranged to communicate with said Closed Device or devices and act as a pure slave to said Closed Device ~~device~~ or devices[[,]];;

a server in said external network on which is installed a Personal Area Network middleware, said server being arranged to communicate with said Closed Device ~~closed device~~ or devices in order to act as a Personal Area Network controller, wherein
said Personal Area Network middleware is arranged to store and maintain a device profile, said device profile including information on at least identity, type, capabilities and services offered by any Open, Closed or Primitive Devices available for said Private Area Network,
said Personal Area Network middleware being arranged to discover and register any devices present in said Personal Area Network,
said Personal Area Network middleware being arranged to redirect an output stream from one device to an input port on another device,

said Personal Area Network middleware being arranged to redirect an application to a specific device present in said Personal Area Network,
said Personal Area Network middleware being arranged to store and maintain a user profile, said user profile including information on at least which Open, Closed or Primitive Devices that are members of said Private Area Network, which Open, Closed or Primitive Devices that are available for said Private Area Network, redirection information, which Open, Closed or Primitive Devices that should be visible on an external network, the distribution of services among Open or Closed Devices present, and the distribution of resources among Open or Closed Devices present,
said Personal Area Network middleware further including a user interface enabling the user to control the Personal Area Network middleware, and an Application Programming Interface to said Personal Area Network middleware allowing applications access to capabilities and functions in said Personal Area Network middleware,
each Open Device being arranged to invoke services running on other Open Devices,
said server being arranged to store a backup copy of information stored in said Personal Area Network, and synchronize said backup copy with said information.

10. (Currently amended) A Virtual Device as claimed in claim 9, ~~characterized in that~~ wherein said server is arranged to periodically poll the network.

11. (Currently amended) A Virtual Device as claimed in claim 1, ~~3, 8 or 9~~, characterized in that said Application Programming Interface is implemented ~~in Java or CORBA, or as~~ as one of the following: Java, CORBA, or an XML Web service.

12. (New) A Virtual Device as claimed in claim 1 wherein at least one of said Open or Closed Devices is equipped with a network interface connected to an external network.

13. (New) A Virtual Device as claimed in claim 12, further comprising a server in said external network arranged to store a backup copy of information stored in said Personal Area Network, and synchronize said backup copy with said information.

14. (New) A Virtual Device as claimed in claim 13, wherein said Open Device is arranged to periodically poll the network.

15. (New) A Virtual Device as claimed in claim 1, characterized in that said Application Programming Interface is implemented as one of the following: Java, CORBA, or an XML Web service.

16. (New) A Virtual Device as claimed in claim 3, characterized in that said Application Programming Interface is implemented as one of the following: Java, CORBA, or an XML Web service.